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UNITED STATES AIR FORCE

OCCUPATIONAL SURVEY REPORT

WEATHER CAREER LADDER

AFSC 251X0/A

AFPT 90-251-778

MAY 1988

OCCUPATIONAL ANALYSIS PROGRAM
USAF OCCUPATIONAL MEASUREMENT CENTER
AIR TRAINING COMMAND
RANDOLPH AFB, TEXAS 78150-5000

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PREFACE

This report presents the results of a detailed Air Force occupational survey of the Weather career ladder (AFSC 251XO/A). This survey was requested by the Training Development Services Division of the USAF Occupational Measurement Center (USAFOMC/OMT) to provide current data in view of changes in the career ladder since the last OSR (Jun 79). Authority for conducting occupational surveys is contained in AFR 35-2. Computer products upon which this report is based are available for use by operations and training officials.

The survey instrument was developed by Donald J. Cochran, Inventory Developer, with computer programming support furnished by Ms Rebecca Hernandez. Chief Master Sergeant James T. Duffy, Occupational Analyst, analyzed the survey data and wrote the final report. Administrative support was provided by Mr Richard G. Ramos. This report was reviewed by Lieutenant Colonel Thomas E. Ulrich, Chief, Airman Analysis Branch, Occupational Analysis Division, USAF Occupational Measurement Center.

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel. Additional copies are available upon request to the USAF Occupational Measurement Center, Attention: Chief, Occupational Analysis Division (OMY), Randolph AFB, Texas 78150-5000 (AUTOVON 487-6623).

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SUMMARY OF RESULTS

1. Survey Coverage: Of the 3,290 enlisted members in the AFSC 251X0/A career ladder, 2,015 (61 percent of the total career ladder) were in the final survey sample. Ninety-two percent of personnel sampled were assigned to the Air Weather Service belonging to the Military Airlift Command.

2. Specialty Jobs: Seven major job groups and seven independent job types were identified in the analysis of the AFSC 251X0/A Weather career ladder. The major job groups comprise personnel involved in computer operations, supervisory functions, solar observation and forecasting, Global Weather Central functions, weather station supervisor responsibilities, weather forecasting operations, and weather observing functions. The independent job types consisted of personnel performing duties involved with dropsonde activities, instructing resident courses, data monitoring, upper air observations, special operations, plotting, and radar observing.

3. Career Ladder Progression: The 3- and 5-skill level jobs are highly technical, with little or no responsibility for management or supervision. Seven-skill level personnel, while performing some management and supervisory functions, are still highly technical. The true shift to management and supervisory tasks occurs at the 9-skill level.

4. AFR 39-1 Specialty Descriptions: The 3-, 5-, 7-, 9-skill levels and CEM descriptions accurately depict the nature of the respective jobs.

5. Training Analysis: The STS and POIs are strongly supported by survey data. Some tasks not referenced to any STS item require review to see if they need to be included in the STS. Also, a series of tasks not referenced to any POI element require review in regard to the need for training and, if required, the most appropriate method.

OCCUPATIONAL SURVEY REPORT
WEATHER CAREER LADDER
(AFSC 251X0/A)

INTRODUCTION

This is a report of an occupational survey of the Weather career ladder completed by the Occupational Analysis Division, USAF Occupational Measurement Center, in April 1988. The specialty was last surveyed in December 1979. This report was requested by USAFOMC's Training Development Services Division to provide current OSR data in view of changes in the career ladder since 1979.

Background

As described in the AFR 39-1 specialty descriptions, Weather specialists and technicians are responsible for collecting, recording, and analyzing meteorological and climatological data; making visual and instrument weather observations, including using radar equipment, interpreting weather codes, and entering weather data on appropriate charts; forecasting weather conditions; and briefing aircrews on forecasts obtained through a central weather agency.

Personnel entering this AFSC must attend a 10-week, 4-day Interservice course conducted at Chanute AFB IL. Upon completion of this course, personnel are then assigned to various locations as Weather Observers. Weather observers selected to become forecasters must attend a 22-week, 2-day Supplemental course (C3AAR25170-004/003/002). All 3- and 5-skill level personnel who complete this forecaster course are awarded an "A" Suffix, which is later dropped upon award of the 7-skill level. The Interservice courses conducted at Chanute AFB primarily involve US Navy, US Marine, and Air Force personnel.

SURVEY METHODOLOGY

Inventory Development

The data collection instrument for this survey was USAF Job Inventory AFPT 90-251-778, dated April 1987. A tentative task list was prepared by the inventory developer after reviewing pertinent career ladder publications and directives, tasks from previous survey instruments, and data from the last OSR. To ensure full coverage of the variety of tasks performed by members of the career ladder, critical bases were identified and visited by the inventory developer. This step is important, since visiting bases with similar systems and overlooking bases with unique or different systems may bias the task list and invalidate the results. Those bases and the reason visited are as follow:

3350 TTGP Chanute AFB IL	Technical School
Ft Hood TX	Weather Sqdn Detachment
Holloman AFB NM	Weather Wing Detachment
Offutt AFB NE	Air Force Global Weather Central
Keesler AFB MS	Weather Wing Detachment
Eglin AFB FL	Weather Sqdn Detachment
Hurlburt Field FL	Weather Sqdn Detachment
Tyndall AFB FL	Weather Sqdn Detachment
Pope AFB NC	Weather Sqdn Detachment
Fort Bragg NC	Weather Sqdn Detachment
South Hamilton MA	Weather Wing Detachment
Scott AFB IL	USAFETAC

The Air Force Functional Manager, HQ ATC Training Staff Officer, MAJCOM Functional Managers, Classification and Standards personnel, and Assignments personnel for the field were also contacted.

Data Collection

From May 1987 to September 1987, Consolidated Base Personnel Offices at operational units worldwide administered the inventory to personnel holding a DAFSC of 25130/A, 25150/A, 25170, 25199, or 25100. Participants were selected from a computer-generated mailing list obtained from personnel data tapes maintained by the Air Force Human Resources Laboratory (AFHRL).

Each individual who was administered the inventory first completed an identification and biographical information section and then checked each task performed in their current job. The participants then rated the tasks checked on a 9-point scale showing the relative time spent on that task as compared to all other tasks. The time spent ratings are measured on a scale which ranges from 1 (very small amount of time) through 5 (about average amount of time) to 9 (very large amount of time).

Time spent is a relative measure of how much time individuals perceive themselves to spend on each task, as compared to all other tasks checked in the survey. To calculate time spent, all of an incumbent's ratings are assumed to account for 100 percent of his or her time spent on the job. The rating for each task is divided by the sum of all ratings, then multiplied by 100 to provide a basis for comparing tasks in terms of both percent members performing (where a task is checked by an incumbent) and relative time spent (based on the calculations from the 1-9 scale).

Survey Sample

Personnel were selected to participate in this survey to ensure an accurate representation across major commands and paygrade groups. All eligible DAFSC 251X0/A personnel were mailed survey booklets. To be eligible for the

survey, personnel must have worked in their present job for at least 6 weeks. Those ineligible, and not mailed booklets, include personnel in hospital status, retiring, in PCS status, or being discharged.

Table 1 shows the percentage distribution, by major command, of assigned personnel in the career ladder as of August 1986. Also listed in this table is the percentage distribution, by MAJCOM, of respondents in the final survey. The 2,015 respondents included in the final sample represent 61 percent of the assigned population. Table 2 reflects the paygrade group distribution. As reflected in these tables, the majority of personnel assigned and participating in the survey belong to the Military Airlift Command's Air Weather Service (AWS) and provide excellent representation of the overall career ladder population.

Task Factor Administration

In addition to the job inventory, selected senior personnel completed a second booklet which provided separately processed information concerning either task difficulty (TD) or training emphasis (TE) ratings. TD refers to the length of time required for the average job incumbent to learn to do the task. TE refers to the importance of structured training for first-enlistment personnel. Structured training is training provided through any organized training method, such as resident technical school, field training detachments, mobile training teams, or formal OJT.

Task Difficulty (TD). Each individual completing a TD booklet rated each task with which they were familiar. Tasks were rated on a 9-point scale, ranging from 1 (extremely low relative difficulty) to 9 (extremely high relative difficulty). The interrater reliability (as assessed through components of variance of standardized group means) of the TD data provided by 75 senior NCOs was .96, indicating very high agreement among raters. TD ratings were adjusted to give a rating of 5.00 for a task of average difficulty, with a standard deviation of 1.00. Data are then used to rank-order the inventory tasks in terms of relative difficulty.

Training Emphasis (TE). Individuals completing TE booklets were asked to rate all tasks on a 10-point scale, ranging from no training required to extremely heavy training required. TE data were independently collected from 80 experienced 7-skill level personnel stationed worldwide. The interrater reliability (as assessed through components of variance of standard group means) for this group was .98, indicating very high agreement among raters as to which tasks required some form of structured training and which did not. As discussed in the TD section above, TE rating data may be used to rank-order tasks which senior NCOs in the field consider the most important for first-term airmen to know.

When used in conjunction with the primary criterion of percent members performing, TD and TE ratings can provide insight into first-term personnel training requirements. Such insight may suggest a need for lengthening or shortening portions of instruction supporting AFSC entry-level jobs.

TABLE 1

COMMAND REPRESENTATION OF 251X0/A SURVEY PERSONNEL

	251X0		251X0A	
COMMAND	PERCENT OF ASSIGNED (N=2,505)	PERCENT OF SAMPLE (N=1,706)	PERCENT OF ASSIGNED (N=788)	PERCENT OF SAMPLE (N=309)
MAC	88	95	100	98
ATC	11	2	0	1
OTHER	1	3	0	1

Total Assigned: 3,293

Total Eligible for Survey: 2,705

Total in Sample: 2,015

Percent of Assigned in Sample: 61%

Percent of Eligible in Sample: 74%

TABLE 2

PAYGRADE DISTRIBUTION OF SURVEY SAMPLE

PAYGRADE	PERCENT OF ASSIGNED	PERCENT OF SAMPLE
AIRMAN	19	15
E-4	24	22
E-5	30	31
E-6	14	18
E-7	10	10
E-8	2	2
E-9	1	2

SPECIALTY JOBS
(Career Ladder Structure)

An important function of the USAF occupational analysis program is to examine the job structure within a specialty. Based on responses to survey questions, the computer clustering program clusters individuals together based on similarity of tasks performed and the amount of time spent on those tasks. Analysis of the distinct jobs performed within the career ladder and their relationship to each other results in a display of the structure of work in the specialty. This information can be used to understand current utilization of personnel and to identify job satisfaction trends that may impact management decisions, or to examine such career documents as AFR 39-1 Specialty Descriptions, Specialty Training Standards (STS), or course Plans of Instruction (POI).

Each individual in the survey performs a set of tasks called a job. A group of individuals who perform many tasks in common and spend similar amounts of time performing those tasks is called a job type. Job types having a substantial degree of similarity are clustered and called a major job group. Those specialized job types too dissimiliar to fit within a cluster are labeled independent job types (IJT).

Responses from AFSC 251X0/A personnel in the sample survey indicate a career ladder where the majority perform tasks pertaining to weather observing and forecasting. However, some specialization was evident. Based on the similarity of tasks performed and the amount of time spent performing each task, seven major job groups and seven independent job types were identified in the examination of the Weather career ladder. These major jobs and independent job types are described on the following pages. The stage (STG) or group (GRP) number shown beside each title is a reference to computer-printed information, and the "N" refers to the number of personnel in the stage or group.

I. COMPUTER PERSONNEL (STG013, N=60)

II. DROPSONDE PERSONNEL (STG168, N=20) (IJT)

III. SENIOR SUPERVISORS (STG025, N=102)

IV. SOLAR OBSERVATION AND FORECASTING PERSONNEL (STG050, N=34)

V. DATA MONITOR PERSONNEL (STG022, N=27) (IJT)

VI. UPPER AIR OBSERVER PERSONNEL (STG046, N=36) (IJT)

VII. GLOBAL WEATHER CENTRAL PERSONNEL (STG037, N=120)

VIII. SPECIAL OPERATIONS PERSONNEL (STG098, N=35) (IJT)

IX. WEATHER STATION SUPERVISORS (STG087, N=68)

X. WEATHER OBSERVER PERSONNEL (STG252, N=613)

XI. PLOTTER PERSONNEL (STG067, N=35)(IJT)

XII. RADAR OBSERVER PERSONNEL (STG176, N=11) (IJT)

XIII. INSTRUCTOR PERSONNEL (GRP101, N=32) (IJT)

XIV. WEATHER FORECASTER PERSONNEL (GRP195, N=767)

The respondents forming these stages and groups accounted for 97 percent of the survey sample. Of the remaining 3 percent, most formed groups too small to be identified as a distinct job in the analysis, and the functions they performed were too dissimilar to be grouped with other jobs.

Group Descriptions

The following narratives describe the major job groups identified in the analysis. Table 3 provides selected background data for these groups. (Additional background and job satisfaction data, together with representative tasks for all groups, are listed in Appendix A.)

I. COMPUTER PERSONNEL (STG013, N=60). This major job group contains 60 members, representing 3 percent of the total sample. The group was formed based on the performance of tasks (an average of 53 are performed by group members) concerning weatherized computer functions. Group members develop, write, test, and interpret weather-related computer software programs. Examples of tasks performed include:

add information to existing computer software
assemble weather computer software
interpret computer output products
prepare external computer software documentation
write computer software codes
prepare internal computer software documentation
create computer control instructions
develop weather computer software
communicate with data executive systems
determine flow sequence of computer software

This is an experienced group, with the average paygrade being E-6, having over 11 years (134 months) Time in Career Field (TICF), and just over 13 years (158 months) Total Active Federal Military Service (TAFMS). The group is dominated by 7-skill level personnel (70 percent), and over one-half (33) are assigned to Air Force Global Weather Service located at Offutt AFB NE.

TABLE 3

SELECTED BACKGROUND FOR SPECIALTY JOB GROUPS

	COMP PERS (STG013)	DROPSONDE PERSONNEL (STG168)	SENIOR SUPVRS (STG025)	SOLAR OBSN & FORECASTING PERSONNEL (STG050)	DATA MONITOR PERS (STG022)	UPPER AIR OBS PERS (STG046)	WEATHER CENTRAL PERS (STG037)
NUMBER IN GROUP	60	20	102	34	27	36	120
PERCENT OF SAMPLE	3%	1%	5%	2%	1%	2%	6%
PERCENT IN CONUS	85%	55%	85%	35%	63%	81%	93%
DAFSC DISTRIBUTION:							
25130	0%	0%	0%	6%	7%	11%	0%
25130A	0%	0%	0%	0%	4%	0%	0%
25150	18%	65%	3%	3%	74%	67%	9%
25150A	12%	5%	1%	26%	4%	3%	30%
25170	70%	30%	80%	62%	11%	17%	60%
25190	0%	0%	8%	3%	0%	0%	1%
25100	0%	0%	8%	0%	0%	3%	0%
AVERAGE GRADE	E-6	E-5	E-7	E-6	E-4	E-4	E-5
AVERAGE MONTHS IN CAREER FIELD:	134	82	204	122	53	46	94
AVERAGE MONTHS IN SERVICE:	158	91	227	144	62	76	122
PERCENT IN FIRST ENLISTMENT:	5%	45%	0%	6%	56%	44%	23%
NUMBER SUPERVISED:	1	1	3	2	2	3	3
AVG NUMBER OF TASKS PERFORMED:	53	59	40	104	38	111	62

TABLE 3 (CONTINUED)

SELECTED BACKGROUND FOR SPECIALTY JOB GROUPS

	SPECIAL OPS PERS (STG098)	WEATHER STATION SUPVRS (STG087)	WEATHER OBS PERS (STG252)	PLOTTER PERS (STG067)	RADAR OBS PERS (STG176)	INSTR PERS (GRP101)	WEATHER FORECASTER PERSONNEL (GRP195)
NUMBER IN GROUP	35	68	613	35	11	32	767
PERCENT OF SAMPLE	2%	3%	30%	2%	*	2%	38%
PERCENT IN CONUS	69%	78%	71%	100%	73%	100%	78%
DAFSC DISTRIBUTION							
25130	0%	0%	21%	54%	9%	3%	9%
25130A	0%	0%	1%	0%	0%	0%	1%
25150	14%	8%	73%	46%	82%	38%	33%
25150A	11%	6%	3%	0%	9%	6%	15%
25170	66%	69%	2%	0%	0%	53%	40%
25190	9%	16%	0%	0%	0%	0%	1%
25100	0%	1%	0%	0%	0%	0%	1%
AVERAGE GRADE:	E-6	E-6	E-4	E-3	E-4	E-6	E-5
AVERAGE MONTHS IN CAREER FIELD:	123	169	29	12	28	114	87
AVERAGE MONTHS IN SERVICE:	152	198	48	18	50	132	108
PERCENT IN FIRST ENLISTMENT:	6%	3%	87%	97%	55%	3%	24%
NUMBER SUPERVISED:	2	4	1	0	0	1	2
AVERAGE NUMBER OF TASKS PERFORMED:	218	143	126	37	60	55	137

* Indicates less than 1 percent

II. DROPSONDE PERSONNEL (STG168, N=20). The 20 members of this independent job type are all assigned to Weather Wings at Keesler AFB MS or Andersen AB GQ. They spend 44 percent of their time performing tasks on weather reconnaissance aircraft that are related to dropsonde data or equipment. Averaging over 6 years (82 months) TICF and 7½ years TAFMS, they have an average paygrade of E-5. They perform an average of 59 tasks, including:

perform flight crew checklists tasks
perform preflight inspections of weather reconnaissance aircraft
perform in-flight inspections on weather reconnaissance aircraft
read and interpret dropsonde data
evaluate dropsonde data on weather reconnaissance aircraft
perform equipment tie-down on weather reconnaissance aircraft
perform drops of instruments
perform postflight routines
preflight dropsonde instruments
load dropsondes in dispensers

Seventy percent of the personnel in this group are 5-skill level, with the remaining 30 percent at the 7-skill level.

III. SENIOR SUPERVISORS (STG025, N=102). With an average paygrade of E-7, the 102 members of this group form the senior group of the survey sample (averaging 18.9 years TAFMS). They indicate spending 78 percent of their relative job time performing tasks pertaining to general supervisory, managerial, and administrative duties. A sampling of the tasks performed include:

write correspondence
compile data for reports
review incoming correspondence
review outgoing correspondence
edit official correspondence and messages
perform self inspections
evaluate proposed publications
inspect personnel for compliance with military standards
determine work priorities
draft directives and directive changes

The majority of personnel in this group (79 percent) indicate they are assigned to Air Force Global Weather Central, Weather Wings, or Air Weather Service.

IV. SOLAR OBSERVATION AND FORECASTING PERSONNEL (STG050, N=34). This group contains 34 members, of which 65 percent are assigned overseas. With an average paygrade of E-6, they indicate spending the majority of their relative job time (44 percent) on tasks pertaining to solar weather observing and forecasting functions. Sixty-two percent of the members hold the 7-skill level and have an average TAFMS of 12 years. Examples of tasks performed are:

perform solar presunrise procedures
analyze radio frequency interferences (RFI)
analyze radio burst spectrum data
monitor astrogeophysical data bases
analyze and report solar flares
perform H Alpha analysis
perform flare patrols in automatic mode
perform white light analysis
transmit solar optical reports
annotate solar analysis chart forms

V. DATA MONITOR PERSONNEL (STG022, N=27). The 27 members of this independent job group indicate they spend 34 percent of their relative job time performing tasks concerning the handling and monitoring of data from weather computers. Their average paygrade is E-4, with 78 percent holding the 5-skill level. Typical tasks performed include:

edit computer rejected weather data
prepare automatic response to query (ARQ) requests
remove garbled data
transmit teletype messages
reinsert routine delayed (RTD) weather reports into computer system
evaluate retargeting global weather intercept program (GWIP) data
file teletype messages
encode messages
decode teletype messages
monitor response to data deficiency bulletins

Group members average over 4 years (53 months) TICF and 5 years TAFMS. They average performing only 38 tasks, with 78 percent of the personnel indicating little or no utilization of training.

VI. UPPER AIR OBSERVER PERSONNEL (STG046, N=36). This independent job group of 36 members perform tasks relating to upper air observations, specifically on rawinsonde and radiosonde equipment. They average just under 4 years (46 months) TICF and over 6 years (76 months) TAFMS. Personnel in this group perform an average of 111 tasks. Examples of these tasks are:

operate rawinsonde set main assembly equipment at release
inflate balloons with helium
obtain balloon release clearances
assemble flight trains
launch flight equipment
assemble rawinsonde ballooon equipment
calculate volume of gas to be used in balloon inflations
evaluate upper air data
perform radiosonde preflight circuit checks
verify upper air data

This group is dominated by 5-skill level personnel (70 percent), and they have an average paygrade of E-4. Eighty-one percent of the members are assigned to CONUS locations.

VII. GLOBAL WEATHER CENTRAL PERSONNEL (STG037, N=120). With few exceptions, the 120 members of this group are all assigned to Global Weather Central, Offutt AFB NE. They perform a myriad of tasks pertaining to analyzing weather data, not only in the CONUS, but around the world, including Europe, Asia, and the Pacific. Typical of the 62 average tasks performed are:

analyze upper air charts
analyze vorticity charts
determine weather system movements
locate meteorological features on charts
analyze satellite sensed data
analyze synoptic surface charts
analyze upper level winds
analyze thickness charts
analyze streamline charts
analyze jet stream charts

The average paygrade for this group is E-5, with over 7 years (94 months) TICF and 10 years TAFMS. This is a more experienced group, with 60 percent of the members holding the 7-skill level.

VIII. SPECIAL OPERATIONS PERSONNEL (STG098, N=35). The 35 members of this independent job type provide weather support for contingency operations, special operations, and as cadre team members for the US Army. Sixteen members are assigned to US Army locations. With an average paygrade of E-6, this group is also one of the more experienced groups in the sample survey as 66 percent hold the 7-skill level. Examples of tasks performed include:

conduct mobility training
prepare equipment for deployments
identify equipment requirements for deployments

prepare personal clothing for deployments
determine equipment requirements for mobility exercises or deployments
identify equipment requirements for mobility operations
prepare sites at deployed locations
plan mobility training requirements
identify personnel requirements for deployments
maintain mobility training charts

IX. WEATHER STATION SUPERVISORS (STG087, N=68). The 68 airmen forming this group indicate they spend 48 percent of their relative job time performing tasks pertaining to supervisory and managerial duties. The remainder of their job time is spent on tasks that concern supply, administrative, and technical weather functions. With an average paygrade of E-6, 69 percent of these personnel are assigned to weather stations (Detachments) around the world. This alone causes them to be more of a technical supervisor, unlike the senior supervisors who are assigned mainly to staff jobs. Examples of tasks performed are:

perform self-inspections
counsel subordinates, such as on job progression, military-related matters, and personal matters
determine work priorities
write recommendations for awards and decorations
write APR
inspect personnel for compliance with military standards
establish performance standards for subordinates
establish work schedules
evaluate quality control procedures
evaluate personnel for compliance with performance standards

Members of this group average supervising 4 personnel, along with performing an average of 143 tasks. They average just over 14 years (169 months) TICF and 16.5 years (198 months) TAFMS.

X. WEATHER OBSERVER PERSONNEL (STG252, N=613). The 613 personnel in this group make up the second largest group in the survey sample. They spend the majority of their relative job time (63 percent) performing tasks pertaining to weather observing and general weather duties. With an average paygrade of E-4, 87 percent of group members are in their first enlistment. Typical of the tasks performed are:

determine prevailing visibility values
determine amount of coverage of cloud layers aloft
determine ceiling
determine wind speeds

determine station pressures
determine amount of obscurations
determine pressure altitudes
plot Skew T charts
determine number of cloud layers aloft
advise forecaster of changing weather conditions

XI. PLOTTER PERSONNEL (STG067, N=35). The 35 members in this group average 1 year TICF and just over 1 year (18 months) TAFMS. They are the junior group in the survey sample and perform an average of 37 tasks on duties involving plotting weather information and general weather tasks. A sampling of these tasks are:

plot icing reports
file teletype messages
replace paper on teletypes
change printer ribbons
plot turbulence reports
clean acetate overlays
file plotted charts
plot aircraft reports (AIREP)
file plotted maps
plot pilot reports (PIREP)

With 54 percent (19 members) holding the 3-skill level and 46 percent (16 members) at the 5-skill level, all of these airmen are assigned to Air Force Global Weather Central, Offutt AFB NE.

XII. RADAR OBSERVER PERSONNEL (STG176, N=11). This independent job type of 11 airmen perform an average of 60 tasks that pertain to general weather duties and observing weather by radar. They average over 2 years (28 months) TICF and have an average paygrade of E-4. Examples of tasks performed are:

record radar reports (RAREP)
plot Skew T charts
determine echo coverages
determine echo tops
determine speed and direction of echo movements
determine echo types
log radar observations
determine echo intensities
post charts
post local weather information, such as observations, forecasts, and take-off data

The average TAFMS for members of this group is over 4 years (50 months), and 91 percent hold the 5-skill level.

XIII. INSTRUCTOR PERSONNEL (GRP101, N=32). The 32 members of this group spend 46 percent of their relative job time performing tasks pertaining to conducting resident course instruction. With the exception of one individual, all of these personnel are involved with either the basic 3-skill level, 7-skill level forecaster, or the rawinsonde courses. They have an average paygrade of E-6, and average just over 9 years (114 months) TICF. Training tasks include:

conduct resident course classroom training
administer tests
score tests
counsel trainees on training progress
prepare lesson plans
write test questions
evaluate progress of trainees
demonstrate how to locate technical information
develop resident course curriculum materials
conduct specialized training

XIV. WEATHER FORECASTER PERSONNEL (GRP195, N=767). The 767 personnel in this group represent the largest group (38 percent) in the survey sample. They perform an average of 137 tasks pertaining to general weather, analyzing weather information, observing, forecasting, and disseminating weather duties. With an average paygrade of E-5, members average over 7 years (87 months) TICF and 9 years (108 months) TAFMS. Typical forecasting tasks are:

perform quality control procedures
decode weather forecasts
prepare automatic response to query (ARQ) request
present shift change briefings
cancel weather advisories
cancel weather warnings
issue local weather advisories
analyze local area work charts (LAWC)
issue local weather warnings
update weather warnings

Of the 767 members, 58 percent (445 members) indicate they have attended the forecasters' course. Consequently, the majority of forecaster personnel in the survey sample (68 percent) are performing in this group.

Comparison To Previous OSR

The results of this survey were compared to those of the previous Occupational Survey Report (AFPT 90-253-060), dated December 1979. This analysis can help identify changes in the career ladder due to new missions, changing management policies, new equipment, and other areas and functions of management which might change over time. With few exceptions, the two surveys are almost identical for structural purposes. Those exceptions are:

a. In the 1987 survey, Forecaster Support Personnel did not group separately.

b. Staff Operations Personnel identified in the 1979 survey as a group, did not group in this latest survey.

c. Both the Weather Editors and Data Input Specialists grouped together under Data Monitors (IJT) in the 1987 survey.

d. Special Project Forecasters and Satellite Data Acquisition Personnel did not group separately as in the 1979 survey, but were identified in the Global Weather Central Personnel group of the 1987 survey.

e. Rawinsonde Operators in the 1979 survey are now titled Upper Air Observer Personnel, with very little change in tasks performed.

f. Two distinct groups of supervisory personnel, Senior Supervisors, and Weather Station Supervisors, were identified in this latest survey, compared to the single Weather Managers group in the 1979 survey.

The actual jobs performed have changed little over time and, aside from the above minor differences, the overall career ladder is relatively stable. The present classification structure is well supported by survey data.

ANALYSIS OF DAFSC GROUPS

An analysis of DAFSC groups, in conjunction with the analysis of the career ladder structure, is an important part of each occupational analysis project. The DAFSC analysis identifies differences in tasks performed at the various skill levels. This information can be used to evaluate how well career ladder documents, such as AFR 39-1 Specialty Descriptions and the STS, reflect what career ladder personnel actually are doing in the field.

A comparison of tasks performed between DAFSCs 25130 and 25150 indicates that, while there are some minor differences, by and large, the jobs they perform are essentially the same. Therefore, they will be discussed as a combined group in this report. However, DAFSC 25130A and 25150A will be discussed separately since major differences were noted in terms of tasks performed and amount of time spent on coperformed tasks (see Table 4 for differences). The distribution of skill level groups across career ladder jobs is displayed in Table 5, while Table 6 offers another perspective by displaying the relative time spent on each duty across skill level groups. A typical pattern of progression is present, with personnel spending more of their relative time on duties involving supervisory, managerial, and administrative tasks (see Table 6, Duties A, B, C, D, and E) as they move upward from the 5- to the 7-skill level.

Skill Level Descriptions

DAFSC 25130/25150. The 860 airmen in the 3- and 5-skill level group (representing 43 percent of the survey sample) perform an average of 106 tasks. Performing a highly technical job, 80 percent of their relative duty time is devoted to tasks covering performing weather observing functions and general weather tasks, servicing weather equipment, observing weather by radar, and plotting and disseminating weather information. The majority of these personnel were found in the Observers job group (66 percent), with the remainder scattered throughout the other job groups (see Table 5). Representative tasks performed by these airmen are displayed in Table 7.

DAFSC 25130A. The 10 members in the 25130A skill level represent less than 1 percent of the survey sample. Performing an average of 131 tasks, they spend 67 percent of their relative duty time performing tasks pertaining to weather observing functions, general weather tasks, and servicing weather equipment. These personnel indicate spending only 4 percent of their duty time performing tasks involving analyzing weather information, and only 2 percent of their time involves performing weather forecasting tasks. Table 4 displays representative tasks performed by these airmen.

DAFSC 25150A. In contrast to the 25130A skill level personnel, the 299 members of the 25150A group indicate spending 16 percent of their relative duty time performing tasks pertaining to analyzing weather information, and 9 percent of their duty time is spent on tasks pertaining to weather forecasting functions. The 299 personnel in this group represent 15 percent of the survey sample. Representative tasks performed by these 25150A airmen are also displayed in Table 4.

DAFSC 25170. Representing 40 percent of the survey sample, the 801 airmen in the 7-skill level group perform an average of 163 tasks. Even though there is a slight rise in supervisory functions (see Table 6, Duties A, B, C, and D) from the 5- to 7-skill level, 65 percent of the group's relative job time is spent performing technical tasks. The majority of these personnel (56 percent) are in the Forecasters job group, with only 10 percent being in the

TABLE 4

TASKS WHICH BEST DIFFERENTIATE DAFSC 25130A AND 25150A PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING: 25130A PERSONNEL (N=10)	25150A PERSONNEL (N=299)	DIFFERENCE
WIND RECORDING INSTRUMENT CLOCKS	80	26	54
VERIFY ACCURACY OF ANEROID BAROMETERS	80	27	53
ESTIMATE HEIGHT OF CLOUD LAYERS USING KNOWN LANDMARKS	80	29	51
ADVISE FORECASTER OF CHANGING WEATHER CONDITIONS	90	41	49
REPLINISH INK SUPPLY IN RECORDING INSTRUMENTS	90	41	49
READ PSYCHROMETRIC COMPUTERS	90	42	48
REPLACE WIND RECORDER CHARTS	90	43	47
MEASURE PRECIPITATION	90	45	45
DETERMINE SECTOR VISIBILITIES	90	45	45
ANNOTATE RECORDING INSTRUMENT CHARTS	80	36	44
AMEND WEATHER FORECASTS	20	77	-57
ISSUE WEATHER FORECASTS	20	75	-55
PREPARE FORECAST REVIEWS	10	64	-54
PREPARE AIRCRAFT OPERATIONS FORECASTS	0	54	-54
UPDATE WEATHER WARNINGS	20	73	-53
ANALYZE JET STREAM CHARTS	20	72	-52
BRIEF AIR CREWS	20	71	-51
PERFORM AREA METWATCHES	20	71	-51
PREPARE WEATHER WARNINGS	20	70	-50
ANALYZE SEVERE WEATHER FEATURES	10	60	-50

TABLE 5

DISTRIBUTION OF DAFSC GROUP MEMBERS
ACROSS CAREER LADDER GROUPS

JOB GROUP	DAFSC 25130/50 (N=860) PERCENT	DAFSC 25130A/50A (N=309) PERCENT	DAFSC 25170 (N=801) PERCENT	DAFSC 25190 (N=35) PERCENT	DAFSC 25100 (N=10) PERCENT
I. COMPUTER PERSONNEL (N=60)	1%	2%	5%	0	0
II. DROPSONDE PERSONNEL (N=20)	1%	*	1%	0	0
III. SENIOR SUPERVISORS (N=102)	*	*	10%	23%	80%
IV. SOLAR OBSERVATION AND FORECASTING PERSONNEL (N=34)	*	2%	3%	0	0
V. DATA MONITOR PERSONNEL (N=27)	3%	*	*	0	0
VI. UPPER AIR OBSERVER PERSONNEL (N=36)	3%	*	1%	0	10%
VII. GLOBAL WEATHER CENTRAL PERSONNEL (N=120)	1%	11%	8%	3%	0
VIII. SPECIAL OPERATIONS PERSONNEL (N=35)	1%	1%	3%	9%	0
IX. WEATHER STATION SUPERVISOR'S (N=68)	1%	1%	6%	31%	10%
X. OBSERVER PERSONNEL (N=613)	66%	9%	2%	0	0
XI. PLOTTER PERSONNEL (N=35)	4%	0	0	0	0
XII. RADAR OBSERVER PERSONNEL (N=11)	1%	*	0	0	0
XIII. INSTRUCTOR PERSONNEL (N=32)	2%	*	2%	0	0
XIV. FORECASTER PERSONNEL (N=767)	11%	68%	56%	34%	0
NOT GROUPED	4%	1%	2%	0	0

* Indicates less than 1 percent

TABLE 6

AVERAGE PERCENT TIME SPENT PERFORMING DUTIES BY DAFSC GROUPS

DUTIES	DAFSC 25130/50 (N=860)	DAFSC 25130A/50A (N=309)	DAFSC 25170 (N=801)	DAFSC 25190 (N=35)	DAFSC 25100 (N=10)
A. ORGANIZING AND PLANNING	1	1	4	9	11
B. DIRECTING AND INPLEMENTING	1	1	5	9	11
C. INSPECTING AND EVALUATING	1	1	6	16	32
D. TRAINING	2	3	7	8	6
E. PERFORMING ADMINISTRATIVE TASKS	1	1	5	11	16
F. PERFORMING GENERAL SUPPLY TASKS	1	1	2	7	3
G. PERFORMING GENERAL WEATHER TASKS	19	18	13	8	2
H. SERVICING WEATHER EQUIPMENT	11	4	3	2	1
I. DISSEMINATING WEATHER INFORMATION	5	11	8	4	1
J. PERFORMING WEATHER OBSERVING FUNCTIONS	34	15	9	5	2
K. PLOTTING WEATHER INFORMATION	5	3	2	1	*
L. PERFORMING WEATHER FORECASTING FUNCTIONS	1	9	6	2	*
M. ANALYZING WEATHER INFORMATION	2	16	12	4	1
N. OBSERVING WEATHER BY RADAR	6	7	5	2	0
O. TAKING UPPER AIR OBSERVATIONS	2	*	*	*	2
P. PERFORMING DROPSONDE TASKS ON WEATHER RECONNAISSANCE AIRCRAFT	1	*	*	*	0
Q. PERFORMING COMPUTERIZED WEATHER FUNCTIONS	3	2	5	2	2
R. PERFORMING SOLAR OBSERVATIONS AND FORECASTING	*	2	1	*	0
S. PERFORMING WEATHER SATELLITE RELATED FUNCTIONS	1	1	1	*	0
T. PERFORMING SPECIAL OPERATIONS FUNCTIONS	*	*	*	*	0
U. PERFORMING CONTINGENCY AND MOBILITY FUNCTIONS	3	3	5	10	11

* Indicates less than 1 percent

TABLE 7

REPRESENTATIVE TASKS PERFORMED BY DAFSC 25130/50 PERSONNEL

TASKS	PERCENT PERFORMING (N=860)
CHANGE PRINTER RIBBONS	85
PERFORM QUALITY CONTROL PROCEDURES	83
PRESENT SHIFT CHANGE BRIEFINGS	83
PERFORM CLEANUP OF WEATHER STATION	82
REPLACE PAPER ON TELETYPES	81
FILE TELETYPE MESSAGES	81
PLOT SKEW T CHARTS	80
POST CHARTS	77
PREPARE AUTOMATIC RESPONSE TO QUERY (ARQ) REQUESTS	76
DETERMINE WIND SPEED	76
DETERMINE PRECIPITATION TYPES	76
DETERMINE PRECIPITATION INTENSITIES	76
DETERMINE AMOUNT OF COVERAGE OF CLOUD LAYERS ALOFT	75
DETERMINE PREVAILING VISIBILITY VALUES	75
REPLACE FACSIMILE PAPERS	75
FILE PLOTTED CHARTS	75
DETERMINE CEILING	74
DETERMINE AMOUNT OF OBSCURATIONS	74
DETERMINE PRESSURE ALTITUDES	74
DETERMINE STATION PRESSURES	74

Senior Supervisors group. Table 8 displays representative tasks performed by these 7-skill level airmen, while Table 10 shows tasks which best differentiate between DAFSCs 25130/50 and 25170.

DAFSC 25190/00. The shift to almost pure supervisory functions at the 9- and CEM-code level is evident by the fact that these 45 airmen (35 9-skill level and 10 CEM) spend 68 percent of their relative job time performing tasks pertaining to supervisory duties. While 34 percent of the 9-skill level personnel are in the Forecaster job group, 31 percent are found in the Weather Station Supervisors group, and another 23 percent are in the Senior Supervisors group. Eighty percent of the CEMs are found in the Senior Supervisors job group.

Members of this group perform tasks pertaining to inspecting and evaluating, administrative duties, and organizing contingency and mobility functions. Table 9 displays representative tasks performed by these 9-skill level and CEM personnel, while Table 11 indicates tasks which best differentiate between DAFSCs 25170 and 25190/00.

Summary

Career ladder progression is evident, with the jobs being highly technical up through the 7-skill level. Although 7-skill levels do pick up some supervisory responsibilities, the shift to pure supervision occurs at the 9-skill level.

AFR 39-1 SPECIALTY DESCRIPTIONS

Survey data for the 3- thru 9-skill level and CEM were compared to AFR 39-1 Specialty Descriptions for the Weather Specialist (AFSC 25130/50), Weather Technician (AFSC 25170), and Weather Superintendent (AFSC 25190, CEM Code 25100), dated 1 Feburary 1988. Based on the findings of this OSR, these descriptions appear complete and accurately reflect the range of duties and responsibilities of the career ladder at the time of the occupational survey.

TRAINING ANALYSIS

Occupational survey data are one of the many sources of information which can be used to assist training managers in the development of training programs. Proper use of these data will produce training programs which are more relevant to the needs of personnel working in their first assignments in a career ladder. Factors which may be used in evaluating training include the overall description of the jobs being performed by first-enlistment personnel and their overall distribution across career ladder jobs, percentages of

TABLE 8

REPRESENTATIVE TASKS PERFORMED BY DAFSC 25170 PERSONNEL

TASKS	PERCENT PERFORMING (N=860)
PERFORM QUALITY CONTROL PROCEDURES	74
DECODE WEATHER FORECASTS	73
DECODE TELETYPE	72
PRESENT SHIFT CHANGE BRIEFINGS	71
PERFORM SELF-INSPECTIONS	69
WRITE APR	67
ANALYZE SKEW T LOG P DIAGRAMS	66
ANALYZE FACSIMILE PRODUCTS	65
ANALYZE LOCAL AREA WORK CHARTS (LAWC)	65
REANALYZE CENTRALLY-PRODUCED FACSIMILE PRODUCTS	64
ANALYZE VORTICITY CHARTS	63
ENCODE WEATHER FORECASTS	63
ISSUE WEATHER FORECASTS	62
LOCATE METEOROLOGICAL FEATURES ON CHARTS	62
DETERMINE WEATHER SYSTEM MOVEMENTS	62
PERFORM AREA METWATCHES	61
BRIEF AIRCREWS	61
COUNSEL SUBORDINATES, SUCH AS ON JOB PROGRESSION, MILITARY-RELATED MATTERS, AND PERSONAL MATTERS	60
PERFORM TERMINAL METWATCHES	60
EVALUATE PROGRESS OF TRAINEES	59

TABLE 9

REPRESENTATIVE TASKS PERFORMED BY DAFSC 25190/00 PERSONNEL

TASKS	PERCENT PERFORMING (N=45)
PERFORM SELF-INSPECTIONS	91
WRITE CORRESPONDENCE	90
INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	89
COMPILE DATA FOR REPORTS	87
EVALUATE PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	82
REVIEW OUTGOING CORRESPONDENCE	80
REVIEW AND EDIT RECOMMENDATIONS FOR AWARDS AND DECORATIONS	80
REVIEW INCOMING CORRESPONDENCE	78
EDIT OFFICIAL CORRESPONDENCE AND MESSAGES	76
DRAFT DIRECTIVES AND DIRECTIVE CHANGES	73
COUNSEL SUBORDINATES, SUCH AS ON JOB PROGRESSION, MILITARY-RELATED MATTERS, AND PERSONAL MATTERS	73
EVALUATE QUALITY CONTROL PROCEDURES	71
DETERMINE WORK PRIORITIES	69
EVALUATE EFFECTIVENESS OF TRAINING PROGRAMS	67
WRITE APR	67
DETERMINE LOGISTICS REQUIREMENTS, SUCH AS EQUIPMENT, PERSONNEL, AND SPACE	67
WRITE RECOMMENDATIONS FOR AWARDS AND DECORATIONS	67
EVALUATE WEATHER SUPPORT REQUIREMENTS	64
EVALUATE PROPOSED PUBLICATIONS	64
INSPECT FACILITIES	64

TABLE 10

TASKS WHICH BEST DIFFERENTIATE DAFSC 25130/50 AND 25170 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING: 25130/50 PERSONNEL (N=860)	25170 PERSONNEL (N=801)	DIFFERENCE
REPLACE WIND RECORDER CHARTS	70	34	36
ADVISE FORECASTER OF CHANGING WEATHER CONDITIONS	71	36	35
READ WET BULB TEMPERATURES	72	37	35
MEASURE PRECIPITATION	73	39	34
DETERMINE SECTOR VISIBILITIES	73	39	34
DETERMINE STATION PRESSURES	74	40	34
PERFORM BAROMETER COMPARISONS	62	29	33
READ DRY BULB TEMPERATURES	71	38	33
DETERMINE PREVAILING VISIBILITY VALUES	75	43	32
DETERMINE CEILING	74	42	32
WRITE APR	9	67	-58
ANALYZE UPPER AIR CHARTS	13	70	-57
AMEND WEATHER FORECASTS	7	62	-55
REANALYZE CENTRALLY-PRODUCED FACSIMILE PRODUCTS	10	64	-54
ANALYZE VORTICITY CHARTS	10	63	-53
ISSUE WEATHER FORECASTERS	10	62	-52
DETERMINE WEATHER SYSTEM MOVEMENTS	10	62	-52
PREPARE WEATHER WARNINGS	10	61	-52
ANALYZE SKEW T LOG P DIAGRAMS	14	66	-52
ANALYZE FACSIMILE PRODUCTS	14	65	-51

TABLE 11

TASKS WHICH BEST DIFFERENTIATE DAFSC 25170 AND 25190/00 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING: 25170 PERSONNEL (N=801)	25190/00 PERSONNEL (N=45)	DIFFERENCE
PRESENT SHIFT CHANGE BRIEFINGS	71	29	42
ANALYZE VORTICITY CHARTS	63	22	41
PERFORM QUALITY CONTROL PROCEDURES	74	38	36
FILE AUTOMATED FACSIMILE CHARTS	51	16	36
POST LOCAL WEATHER INFORMATION, SUCH AS OBSERVATIONS, FORECASTS, AND TAKE-OFF DATA	52	18	34
CONDUCT OJT	52	18	34
PREPARE FORECAST REVIEWS	53	20	33
ANALYZE UPPER AIR CHARTS	70	38	32
FILE TELETYPE MESSAGES	55	22	32
POST TELETYPE MESSAGES	58	26	32
REVIEW AND EDIT RECOMMENDATIONS FOR AWARDS AND DECORATIONS	27	80	-53
DRAFT DIRECTIVES AND DIRECTIVE CHANGES	26	73	-47
EDIT OFFICIAL CORRESPONDENCE AND MESSAGES	29	76	-47
REVIEW OUTGOING CORRESPONDENCE	34	80	-46
EVALUATE PROPOSED PUBLICATIONS	20	64	-44
SCHEDULE PERSONNEL FOR TEMPORARY DUTY ASSIGNMENTS	17	60	-43
EVALUATE WEATHER SUPPORT REQUIREMENTS	25	64	-39
DETERMINE LOGISTICS REQUIREMENTS, SUCH AS EQUIPMENT, PERSONNEL, AND SPACE	28	67	-39
EVALUATE SELF-INSPECTION PROGRAMS	21	58	-38
REVIEW INCOMING CORRESPONDENCE	41	78	-37

first-job (1-24 months TAFMS) or first-enlistment (1-48 months TAFMS) members performing specific tasks, and TE and TD ratings (previously explained in the SURVEY METHODOLOGY section).

To assist specifically in the review of the STS and the POI, subject-matter experts (SME) from the 3350 TCHTG, Chanute AFB IL, matched job inventory tasks to the appropriate paragraphs and subparagraphs of the STS and POI for Course 3ABR25130-000, Volume I, Weather Specialist, Common Blocks I and II, and Volume II, Block III, AF Unique Subjects. Also, since Course 3AAR25170-002/003/004, Weather Technician, is a mandatory requirement for Weather Specialists to become Forecasters, SMEs matched job inventory tasks to this POI as well. It is these task matchings upon which comparisons to those documents are based. A complete computer listing displaying the percent members performing tasks, TE and TD ratings for each task, along with the STS and POI matchings, has been forwarded to the technical school for their use in further detailed reviews of training documents. Summaries of the above-mentioned data and information are given below.

First-Enlistment Personnel

There are 454 AFSC 251X0 and 33 AFSC 251X0A members in their first enlistment in this study (1-48 months TAFMS), together representing 24 percent of the total survey sample. The job performed by the AFSC 251X0A personnel covers a wide range of weather activities. As displayed in Table 12, approximately 95 percent of their duty time is devoted to technical task performance. The AFSC 251X0 personnel also spend approximately 95 percent of their relative job time on a wide range of Weather activities, with the distinguishing duty being performing weather observing functions. The AFSC 251X0s spend 36 percent of their duty time performing tasks within this duty, while the AFSC 251X0A members only spend 27 percent of their time performing tasks in the same duty. However, as can be expected, AFSC 251X0A personnel spend approximately 10 percent of their duty time on tasks pertaining to analyzing weather information, while AFSC 251X0 members spend less than 1 percent. Table 13 displays tasks which best differentiate the AFSC 251X0A and 251X0 first-enlistment personnel.

Specialty Training Standard (STS)

A comprehensive review of STS 251X0, dated January 1987, compared STS items to survey data. STS paragraphs and subparagraphs containing general knowledge information or subject-matter knowledge requirements were not addressed. Overall, the STS is well supported by survey data and provides comprehensive coverage of the work performed by personnel in the field.

Two separate computer products were produced for the AFSC 251X0 STS. One product displays the matched tasks and percent performing data for the combined AFSC 251X0/251X0A sample, while the other displays matched tasks and percent performing data for only the AFSC 251X0 survey members. Using both products, only one subparagraph--11e (Report Seismic Activity)--does not meet

TABLE 12

AVERAGE PERCENT TIME SPENT PERFORMING DUTIES BY
FIRST-ENLISTMENT GROUPS
(1-48 MONTHS TAFMS)

DUTIES	DAFSC 251X0A (N=33)	DAFSC 251X0 (N=454)
A. ORGANIZING AND PLANNING	*	*
B. DIRECTING AND IMPLEMENTING	*	*
C. INSPECTING AND EVALUATING	*	*
D. TRAINING	*	2
E. PERFORMING ADMINISTRATIVE TASKS	*	*
F. PERFORMING GENERAL SUPPLY TASKS	*	*
G. PERFORMING GENERAL WEATHER TASKS	18	19
H. SERVICING WEATHER EQUIPMENT	8	12
I. DISSEMINATING WEATHER INFORMATION	9	4
J. PERFORMING WEATHER OBSERVING FUNCTIONS	27	36
K. PLOTTING WEATHER INFORMATION	4	6
L. PERFORMING WEATHER FORECASTING FUNCTIONS	6	*
M. ANALYZING WEATHER INFORMATION	10	*
N. OBSERVING WEATHER BY RADAR	7	6
O. TAKING UPPER AIR OBSERVATIONS	*	2
P. PERFORMING DROPSONDE TASKS ON WEATHER RECONNAISSANCE AIRCRAFT	2	*
Q. PERFORMING COMPUTERIZED WEATHER FUNCTIONS	4	3
R. PERFORMING SOLAR OBSERVATIONS AND FORECASTING	0	*
S. PERFORMING WEATHER SATELLITE RELATED FUNCTIONS	*	*
T. PERFORMING SPECIAL OPERATIONS FUNCTIONS	0	*
U. PERFORMING CONTINGENCY AND MOBILITY FUNCTIONS	1	3

* Indicates less than 1 percent

TABLE 13

TASKS WHICH BEST DIFFERENTIATE DAFSC 251XOA AND 251XO FIRST-ENLISTMENT PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING		DIFFERENCE
	251XOA PERSONNEL (N=33)	251XO PERSONNEL (N=454)	
ANALYZE FACSIMILE PRODUCTS	64	10	54
DETERMINE WEATHER SYSTEM MOVEMENTS	58	4	54
BRIEF AIR CREWS	58	5	53
ANALYZE LOCAL AREA WORK CHARTS (LAWC)	64	11	53
PREPARE BRIEFING TRANSPARENCIES	64	13	51
ANALYZE VORTICITY CHARTS	55	4	51
REANALYZE CENTRALLY-PRODUCED FACSIMILE PRODUCTS	55	4	51
AMEND WEATHER FORECASTS	52	2	50
DETERMINE WEATHER SYSTEM ACTIVITIES	52	2	50
ANALYZE SKEW T LOG P DIAGRAMS	58	8	50

the 20 percent performing requirement, as stipulated in ATCR 52-22. This element of the STS should be reviewed by subject-matter experts and training personnel for possible deletion.

Also, there are numerous tasks that were not matched in both products. In reviewing these unmatched tasks, it is apparent that some of these tasks could have been initally matched by subject-matter experts. For example: Task H229, Make Equipment Adjustments, possibly could have been matched to any subparagraph under paragraph 8, Weather Equipment. Training personnel and subject-matter experts should review the "Tasks Not Referenced" listing for other tasks falling into the above category, and also for those tasks that indicate more than 20 percent of the members in the survey sample are performing. Tasks with more than 20 percent performing should be considered for inclusion in the STS.

Plan of Instruction (POI)

Based on the assistance from technical school subject-matter experts in matching tasks to the two previously mentioned POIs, computer products were generated displaying the results of the matching process. Information furnished for consideration includes percent members performing data for first-job and first-enlistment personnel and TE and TD ratings. As in the STS, general knowledge information and subject-matter knowledge requirements were not addressed.

Review of the tasks matched to POI 3ABR25130-000, Volume I, Common Blocks I and II, reveals that the following two objectives do not meet the 30 percent performing requirement outlined in ATCR 52-22:

> Block II 1d. Given the appropriate plotting guide and land synoptic observations, plot 30 stations within 20 minutes with no more than 5 errors in the 10 stations graded. Task matched---K409 Plot snyoptic codes---indicates only 22 percent of first-job personnel performing.
>
> Block II 1f. Given the appropriate plotting guide and ship synoptic observations, plot 15 stations within 20 minutes with no more than 5 errors in the 10 stations graded. Task matched---K409 Plot synoptic codes---indicates only 22 percent of first-job personnel performing.

Training personnel should review these two objectives for possible deletion from the POI. The remainder of the objectives in this POI are well supported by survey data (based on percentages of first-job personnel performing). Analysis of the tasks not referenced to Volume I, Common Blocks I and II, reveals a number of unreferenced tasks. Training specialists should exercise caution when reviewing the unreferenced tasks for Volume I, Blocks I and II of this POI, as many of the tasks are matched to objectives found in Volume II, Block III, AF Unique subjects, of the same POI.

One objective in Volume II, Block III--10n (Given simulated communications and operations publications, post 7 out of the 10 changes correctly), indicates insufficient members performing (only 1 percent of first-job personnel) the matched task (E117, Maintain publication files, other than technical orders). Training personnel should consider this objective for deletion from the POI. As in Volume I, Blocks I and II, numerous tasks are not referenced to objectives in this Block of instruction. Again, caution should be exercised when reviewing the tasks not referenced listing provided, because some tasks may be referenced in Volume I. To aid Training specialists when reviewing both "Tasks Not Referenced" listings, a computer-generated product is being provided that will list only those tasks not referenced to either Volume I or Volume II blocks of instruction.

At the request of Technical School personnel, a match was also accomplished for POI 3AAR25170-002/003/004, Weather Technician. Overall, the POI is well supported by survey data. Only one area could be considered for possible deletion from the POI based on the very low percentage of incumbents performing. Objective I 5b reads:

> "Given a SKEW-T diagram with appropriate data and references, correctly interpolate the value of the physical atmospheric variable with 80 percent accuracy within given tolerances."

Only 2 percent of the 5-skill level respondents and 5 percent of 7-skill level respondents report performing the task matched with this objective (M466---Analyze Radiowind Observations). Training personnel should review this objective for possible deletion from the POI, based upon their expertise.

Data from the complete match to the "Weather Technician" POI has been sent to the Technical School for their use in evaluating the course. It's important to note that requirements set forth in ATCR 52-22 (as to levels of percent members performing a task needed to justify its inclusion in a POI) apply only to ABR or 3-skill level training; consequently, the data on this course must be interpreted with caution.

JOB SATISFACTION ANALYSIS

As part of the background section of the survey, job incumbents were asked to respond to several questions, indicating how interesting they found their job, their perception on how well their job utilized their talents and training, how satisfied they were with the sense of accomplishment gained from their work, and their intention to reenlist. Answers from these questions may help managers identify areas of concern.

Of the specialty jobs discussed earlier, incumbents' responses to job satisfaction indicators reveal they are satisfied with their jobs and the kind of work they do, with the exception of the Data Monitors and Plotters groups.

Only 44 percent of the personnel in the Data Monitors group and a surprisingly low 17 percent of the Plotters indicate they are satisfied with their jobs. One reason for this dissatisfaction could be the low number of average tasks performed by members of these groups (38 tasks performed by Data Monitors and 37 tasks performed by Plotters). Also, the menial nature of the tasks performed could be a factor (see Appendices A5 and A11 for examples of tasks performed by these two groups). Positive responses to these questions by AFSC 251X0/A personnel were in the low 50s to low 90s for the remainder of the survey groups (see Table 14). It must also be pointed out that the Plotter personnel group was not only dissastified with their job, they also indicated very low utilization of their talents and training (17 and 3 percent favorable responses).

Another view of job satisfaction data is reflected in Table 15, where data for AFSC 251X0/A TAFMS groups are displayed, together with data for a comparative sample of direct support career ladders surveyed in 1987. These data can give a relative measure of how the job satisfaction of AFSC 251X0/A personnel compares with that of other similar AF specialties. The AFSC 251X0/A personnel were higher in all categories when compared to other direct support career ladders, with the exception of the reenlistment category for 1-48 and 49-96 month TAFMS groups. These two groups were slightly lower than those in the comparative sample (60 compared to 67 in the 1-48 months group and 68 to 74 in the 49-96 month group).

Finally, an indication of how job satisfaction perceptions within the career ladder have changed over time is provided in Table 16, where TAFMS group data for 1988 survey respondents is presented along with data from respondents to the last occupational survey of the career ladder, published in 1979. Only those respondents in the 1-48 months TAFMS category indicated they found their training less utilized than those in the 1979 survey. In all other categories, the 1988 survey respondents indications were higher than those in the 1979 survey, particularly in the reenlistment category, where a considerably larger amount of personnel indicate they will reenlist.

IMPLICATIONS

Overall, the Weather career ladder has remained stable since the last OSR in 1979. Jobs have not changed substantially; job satisfaction, for the most part, remains high; and training programs appear to be providing well-rounded training for both entry-level and Forecaster personnel. Some isolated pockets of job satisfaction, particularly in the Data Monitor and Plotter jobs, may need to be looked at by career ladder managers, and some fine tuning of career ladder documents (AFR 39-1 and STS) should be conducted at an upcoming Utilization and Training Workshop.

TABLE 14

JOB SATISFACTION INDICATORS BY SPECIALTY JOB GROUPS
(PERCENT MEMBERS RESPONDING)

	COMP PERS (N=60)	DROPSONDE PERSONNEL (N=20)	SENIOR SUPVRS (N=102)	SOLAR OBSN & FORECASTING PERSONNEL (N=34)	DATA MONITOR PERS (N=27)	UPPER AIR OBS PERS (N=36)	GLOBAL WEATHER CENTRAL PERS (N=120)
EXPRESSED JOB INTEREST:							
INTERESTING	88	90	78	73	44	92	71
SO-SO	7	5	11	6	30	5	18
DULL	5	0	11	18	26	2	9
PERCEIVED USE OF TALENTS:							
FAIRLY WELL TO PERFECTLY	83	90	76	76	52	89	77
LITTLE OR NOT AT ALL	17	10	24	24	48	11	22
PERCEIVED USE OF TRAINING:							
FAIRLY WELL TO PERFECTLY	50	65	53	53	22	67	71
LITTLE OR NOT AT ALL	50	35	47	47	78	33	27
SENSE OF JOB ACCOMPLISHMENT:							
SATISFIED	82	90	74	65	52	92	60
NEUTRAL	3	10	8	15	11	3	8
DISSATISFIED	15	0	18	20	37	5	31
REENLISTMENT INTENTIONS:							
WILL/PROBABLY WILL REENLIST	68	60	69	82	56	67	75
WILL NOT/PROBABLY WILL NOT REENLIST	12	30	8	15	41	31	15
WILL RETIRE	20	10	23	3	0	2	9

TABLE 14 (CONTINUED)

JOB SATISFACTION INDICATORS BY SPECIALTY JOB GROUPS
(PERCENT MEMBERS RESPONDING)

	SPECIAL OPS PERS (N=35)	WEATHER STATION SUPVRS (N=68)	WEATHER OBS PERS (N=613)	PLOTTER PERS (N=35)	RADAR OBS PERS (N=11)	INSTR PERS (N=32)	WEATHER FORECASTER PERSONNEL (N=767)
EXPRESSED JOB INTEREST:							
INTERESTING	71	93	71	17	55	91	83
SO-SO	20	4	14	51	27	9	9
DULL	9	3	15	31	18	0	7
PERCEIVED USE OF TALENTS:							
FAIRLY WELL TO PERFECTLY	74	93	76	17	73	84	86
LITTLE OF NOT AT ALL	26	7	24	83	27	16	14
PERCEIVED USE OF TRAINING:							
FAIRLY WELL TO PERFECTLY	60	88	93	3	45	91	90
LITTLE OF NOT AT ALL	40	12	7	97	55	9	9
SENSE OF JOB ACCOMPLISHMENT:							
SATISFIED	63	78	65	31	73	88	69
NEUTRAL	9	4	13	11	9	6	6
DISSATISFIED	28	18	22	57	18	6	24
REENLISTMENT INTENTIONS:							
WILL/PROBABLY WILL REENLIST	80	75	61	51	64	91	78
WILL NOT/PROBABLY WILL NOT REENLIST	11	10	39	49	36	3	15
WILL RETIRE	9	15	0	0	0	6	7

TABLE 15

COMPARISON OF JOB SATISFACTION INDICATORS BY TAFMS GROUPS
(PERCENT MEMBERS RESPONDING)*

	1-48 MOS TAFMS		49-96 MOS TAFMS		97+ MOS TAFMS	
	251X0/A (N=487)	COMP SAMPLE** (N=3,237)	251X0/A (N=584)	COMP SAMPLE** (N=1,176)	251X0/A (N=942)	COMP SAMPLE** (N=2,227)
EXPRESSED JOB INTEREST:						
INTERESTING	68	56	74	69	83	73
SO-SO	16	23	13	14	10	15
DULL	15	20	13	15	6	11
PERCEIVED UTILIZATION OF TALENTS:						
FAIRLY WELL TO PERFECTLY	71	65	77	71	85	79
LITTLE OR NOT AT ALL	29	35	22	28	14	20
PERCEIVED UTILIZATION OF TRAINING:						
FAIRLY WELL TO PERFECTLY	79	69	84	72	83	75
LITTLE OR NOT AT ALL	21	29	16	27	16	24
REENLISTMENT INTENTIONS:						
WILL/PROBABLY WILL REENLIST	60	67	68	74	78	69
WILL NOT/PROBABLY WILL NOT REENLIST	40	32	32	23	9	9
WILL RETIRE	0	-	0	1	12	21

* Columns may not add to 100 percent due to nonresponse or rounding
** Comparative sample of Direct Support career ladders surveyed in 1987 (includes AFSCs 391X0, 392X0, 552X5, 566X0, 603X0, 612X1)
\- Less than 1 percent

TABLE 16

COMPARISON OF CURRENT SURVEY AND 1979 TAFMS GROUPS
(PERCENT MEMBERS RESPONDING)

JOB SATISFACTION INFORMATION	1-48 MONTHS		49-96 MONTHS		97+ MONTHS	
	1988 (N=487)	1979 (N=689)	1988 (N=584)	1979 (N=457)	1988 (N=942)	1979 (N=753)
JOB FAIRLY INTERESTING OR BETTER	68	63	74	63	83	78
TALENTS UTILIZED FAIRLY WELL OR BETTER	71	64	77	68	85	83
TRAINING UTILIZED FAIRLY WELL OR BETTER	79	82	84	76	78	78
FAVORABLY CONSIDERING REENLISTMENT	60	33	68	44	78	63

APPENDIX A

SELECTED REPRESENTATIVE TASKS

FOR

CAREER LADDER STRUCTURE GROUPS

TABLE A1

GROUP ID NUMBER AND TITLE: STG013, COMPUTER PERSONNEL
GROUP SIZE: 60 PERCENT OF SAMPLE: 3
AVERAGE GRADE: E-6 AVERAGE TICF: 134 MONTHS
AVERAGE TAFMS: 158 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS		PERCENT MEMBERS PERFORMING
Q583	ADD INFORMATION TO EXISTING COMPUTER SOFTWARE	77
Q585	ASSEMBLE WEATHER COMPUTER SOFTWARE	67
E113	INTERPRET COMPUTER OUTPUT PRODUCTS	65
Q647	PREPARE EXTERNAL COMPUTER SOFTWARE DOCUMENTATION	65
Q668	WRITE COMPUTER SOFTWARE CODES	63
Q648	PREPARE INTERNAL COMPUTER SOFTWARE DOCUMENTATION	60
Q594	CREATE COMPUTER CONTROL INSTRUCTIONS	60
Q604	DEVELOP WEATHER COMPUTER SOFTWARE	60
Q589	COMMUNICATE WITH DATA EXECUTIVE SYSTEMS	60
Q602	DETERMINE FLOW SEQUENCE OF COMPUTER SOFTWARE	60
Q588	CHANGE MEMORY AND MASS STORAGE CONTENTS	60
Q664	TEST WEATHER COMPUTER SOFTWARE	58
Q643	PERFORM MAINTENANCE ON EXISTING COMPUTER	58
Q667	WRITE COMPUTER RUNSTREAMS	58
E130	WRITE CORRESPONDENCE	58
Q662	SUBMIT COMPUTER RUNSTREAMS	55
Q652	READ MEMORY AND MASS STORAGE DUMPS	52
Q587	CATALOG COMPUTER SOFTWARE	52
Q584	ASSEMBLE COMPUTERIZED WEATHER SYSTEM OUTPUTS	50
Q586	BOOT COMPUTERS	50
Q591	COMPILE OUTPUT DATA SUMMARIES	48
Q614	EXTRACT AND REFORMAT COMPUTERIZED WEATHER DATA	47
Q603	DETERMINE WEATHER FACTORS TO BE USED IN COMPUTER SOFTWARE	45
Q623	INITIATE SOFTWARE PROBLEM REPORTS	45
Q599	DESIGN WEATHER COMPUTER SOFTWARE FOR REAL-TIME OPERATING SYSTEMS	43

TABLE A2

GROUP ID NUMBER AND TITLE: STG168, DROPSONDE PERSONNEL
GROUP SIZE: 20 PERCENT OF SAMPLE: 1
AVERAGE GRADE: E-5 AVERAGE TICF: 82 MONTHS
AVERAGE TAFMS: 91 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS		PERCENT MEMBERS PERFORMING
P575	PERFORM FLIGHT CREW CHECKLIST TASKS	100
P579	PERFORM PREFLIGHT INSPECTIONS OF WEATHER RECONNAISSANCE AIRCRAFT	100
P577	PERFORM IN-FLIGHT INSPECTIONS ON WEATHER RECONNAISSANCE AIRCRAFT	100
P581	READ AND INTERPRET DROPSONDE DATA	100
P567	EVALUATE DROPSONDE DATA ON WEATHER RECONNAISSANCE AIRCRAFT	100
P574	PERFORM EQUIPMENT TIE-DOWN ON WEATHER RECONNAISSANCE AIRCRAFT	100
P572	PERFORM DROPS ON INSTRUMENTS	100
P578	PERFORM POSTFLIGHT ROUTINES	100
P580	PREFLIGHT DROPSONDE INSTRUMENTS	100
P568	LOAD DROPSONDE IN DISPENSERS	100
P570	OFF LOAD DROPSONDE CONTAINERS	100
P571	PERFORM ANTIHIJACKING PROCEDURES	100
P573	PERFORM EMERGENCY EQUIPMENT PROCEDURES ON WEATHER RECONNAISSANCE AIRCRAFT	100
P566	BRIEF PASSENGERS ABOARD WEATHER RECONNAISSANCE AIRCRAFT	100
P576	PERFORM GROUND CONTROLLER TASKS	95
P569	MAKE ENTRIES ON FOREIGN CLEARANCE FORMS FOR WEATHER RECONNAISSANCE AIRCRAFT	95
U849	FIRE SMALL ARMS, SUCH AS .38 AND 9MM CALIBER PISTOLS AND M-16 AND GAU-5 RIFLES	65
H233	PERFORM PREFLIGHT CHECKS ON RADIOSONDE INSTRUMENTS	55
G196	PERFORM QUALITY CONTROL PROCEDURES	55
B34	COORDINATE MAINTENANCE OF EQUIPMENT WITH APPROPRIATE AGENCIES	55
U882	PREPARE PERSONAL CLOTHING FOR DEPLOYMENTS	55
G172	ENCODE MESSAGES	50
G169	CONDUCT PUBLIC TOURS OF WEATHER FACILITIES	50
K407	PLOT SKEW T CHARTS	45
U875	PRACTICE COMMUNICATIONS SECURITY (COMSEC) DURING CONTINGENCY EXERCISES OR OPERATIONS	45

TABLE A3

GROUP ID AND TITLE: STG025, SENIOR SUPERVISORS
GROUP SIZE: 102 PERCENT OF SAMPLE: 5
AVERAGE GRADE: E-7 AVERAGE TICF: 204 MONTHS
AVERAGE TAFMS: 227 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS		PERCENT MEMBERS PERFORMING
E130	WRITE CORRESPONDENCE	88
E128	REVIEW INCOMING CORRESPONDENCE	73
B27	COMPILE DATA FOR REPORTS	69
E129	REVIEW OUTGOING CORRESPONDENCE	66
E110	EDIT OFFICIAL CORRESPONDENCE AND MESSAGES	63
C71	PERFORM SELF-INSPECTIONS	63
A5	DETERMINE WORK PRIORITIES	58
C68	INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	57
C60	EVALUATE PROPOSED PUBLICATIONS	54
A14	DRAFT DIRECTIVES AND DIRECTIVE CHANGES	49
C58	EVALUATE PERSONNEL FOR COMPLIANCE WITH PERFORMANCE STANDARDS	48
E125	PREPARE CORRESPONDENCE FOR MAILING	47
E113	INTERPRET COMPUTER OUTPUT PRODUCTS	46
C61	EVALUATE QUALITY CONTROL PROCEDURES	46
B37	COUNSEL SUBORDINATES, SUCH AS ON JOB PROGRESSION, MILITARY-RELATED MATTERS, AND PERSONAL MATTERS	45
C74	WRITE APR	42
C52	CONDUCT STAFF ASSISTANCE VISITS	40
B28	COMPILE DATA FOR STAFF STUDIES	38
C72	REVIEW AND EDIT RECOMMENDATIONS FOR AWARDS AND DECORATIONS	38
D91	EVALUATE EFFECTIVENESS OF TRAINING PROGRAMS	38
E116	MAINTAIN CORRESPONDENCE FILES	38
C64	EVALUATE WEATHER SUPPORT REQUIREMENTS	37
C67	INSPECT FACILITIES	37
C75	WRITE RECOMMENDATIONS FOR AWARDS AND DECORATIONS	37
A17	PLAN BRIEFINGS	35

TABLE A4

GROUP ID AND TITLE: STG050, SOLAR OBSERVATION AND FORECASTING PERSONNEL
GROUP SIZE: 34 PERCENT OF SAMPLE: 2
AVERAGE GRADE: E-6 AVERAGE TICF: 122 MONTHS
AVERAGE TAFMS: 144 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS		PERCENT MEMBERS PERFORMING
R747	TRANSMIT EVENT NOTIFICATIONS	91
C71	PERFORM SELF-INSPECTIONS	88
H249	REPLACE PAPER ON TELETYPES	88
G172	ENCODE MESSAGES	82
G196	PERFORM QUALITY CONTROL PROCEDURES	82
G181	FILE TELETYPE MESSAGES	82
G170	DECODE TELETYPE MESSAGES	79
G212	PRESENT SHIFT CHANGE BRIEFINGS	79
R676	ANNOTATE DAILY ACTIVITIES LOG FORMS	76
G187	MAKE ENTRIES IN STATION LOGS	76
G190	PERFORM CLEANUP OF WEATHER STATION	76
R711	POST SOLAR PHOTOGRAPHS	76
H261	VERIFY ACCURACY OF CLOCKS	76
G176	EXTRACT INFORMATION FROM SOLAR TABLES	76
H226	CHANGE PRINTER RIBBONS	76
Q586	BOOT COMPUTERS	74
R707	PERFORM SOLAR PRESUNRISE PROCEDURES	71
R675	ANALYZE RADIO FREQUENCY INTERFERENCES (RFI)	71
R674	ANALYZE RADIO BURST SPECTRUM DATA	71
R697	MONITOR ASTROGEOPHYSICAL DATA BASES	71
R677	ANNOTATE SOLAR ANALYSIS CHART FORMS	71
G174	EVALUATE MISSION IMPACT DUE TO EQUIPMENT OUTAGES	71
G193	PERFORM EMERGENCY POWER-DOWN PROCEDURES	71
B42	IMPLEMENT QUALITY CONTROL PROCEDURES	68
B27	COMPILE DATA FOR REPORTS	68

TABLE A5

GROUP ID AND TITLE: STG022, DATA MONITOR PERSONNEL
GROUP SIZE: 27 PERCENT OF SAMPLE: 1
AVERAGE GRADE: E-4 AVERAGE TICF: 53 MOMTHS
AVERAGE TAFMS: 62 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS		PERCENT MEMBERS PERFORMING
G212	PRESENT SHIFT CHANGE BRIEFINGS	81
Q607	EDIT COMPUTER REJECTED WEATHER DATA	78
G201	PREPARE AUTOMATIC RESPONSE TO QUERY (ARQ) REQUESTS	78
H249	REPLACE PAPER ON TELETYPES	74
H226	CHANGE PRINTER RIBBONS	70
G181	FILE TELETYPE MESSAGES	67
G172	ENCODE MESSAGES	67
Q655	REMOVE GARBLED DATA	63
I297	TRANSMIT TELETYPE MESSAGES	63
G196	PERFORM QUALITY CONTROL PROCEDURES	63
Q627	KEYPUNCH CARDS	63
G190	PERFORM CLEANUP OF WEATHER STATION	63
G170	DECODE TELETYPE MESSAGES	59
Q653	REINSERT ROUTINE DELAYED (RTD) WEATHER REPORTS INTO COMPUTER SYSTEM	59
G187	MAKE ENTRIES IN STATION LOGS	52
Q654	RELAY SPECIAL DATA REQUESTS	52
G174	EVALUATE MISSION IMPACT DUE TO EQUIPMENT OUTAGES	52
I291	TRANSMIT CODED WEATHER INFORMATION	48
Q657	RETARGET GWIP SITES	48
Q582	ACTIVATE CONTINGENCY PACKAGES ON COMMUNICATION NETWORKS	48
Q658	ROUTE EMERGENCY REQUESTED DATA	48
Q611	EVALUATE RETARGETING GLOBAL WEATHER INTERCEPT PROGRAM (GWIP) DATA	44
J361	PREPARE TELETYPE MESSAGES	44
G171	DECODE WEATHER FORECASTS	44
Q665	TRACE MISSING BULLETINS	44

TABLE A6

GROUP ID AND TITLE: STG046, UPPER AIR OBSERVER PERSONNEL
GROUP SIZE: 36 PERCENT OF SAMPLE: 2
AVERAGE GRADE: E-4 AVERAGE TICF: 46 MONTHS
AVERAGE TAFMS: 76 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS		PERCENT MEMBERS PERFORMING
0535	OPERATE RAWINSONDE SET MAIN ASSEMBLY EQUIPMENT AT RELEASE	100
0527	INFLATE BALLOONS WITH HELIUM	100
0534	OBTAIN BALLOON RELEASE CLEARANCES	100
0513	ASSEMBLE FLIGHT TRAINS	97
0529	LAUNCH FLIGHT EQUIPMENT	94
0515	ASSEMBLE RAWINSONDE BALLOON EQUIPMENT	94
0516	CALCULATE VOLUME OF GAS TO BE USED IN BALLOON INFLATIONS	94
0526	EVALUATE UPPER AIR DATA	92
0538	PERFORM RADIOSONDE PREFLIGHT CIRCUIT CHECKS	92
J369	READ WET BULB TEMPERATURES	92
J337	DETERMINE WIND SPEEDS	89
0564	VERIFY UPPER AIR DATA	86
G189	PERFORM BUILDING SECURITY CHECKS	86
H235	PERFORM PREFLIGHT OPERATIONAL CHECKS ON METEOROLOGICAL UPPER AIR TRACKING EQUIPMENT	83
0517	CALCULATE WINDSPEED AND DIRECTIONS	83
J365	READ DRY BULB TEMPERATURES	83
0561	TEST RAWINSONDE BALLOON EQUIPMENT	83
J368	READ PSYCHROMETRIC COMPUTERS	83
H233	PERFORM PREFLIGHT CHECKS ON RADIOSONDE INSTRUMENTS	81
G196	PERFORM QUALITY CONTROL PROCEDURES	81
0558	TAKE RELEASE OBSERVATIONS	81
J330	DETERMINE RELATIVE HUMIDITY	78
J319	DETERMINE DEW POINTS	78
0549	SELECT RAWINSONDE DATA FOR TRANSMISSION	75
0522	ENCODE RADIOSONDE (RAOB) DATA	75

TABLE A7

GROUP ID AND TITLE: STG037, GLOBAL WEATHER CENTRAL PERSONNEL
GROUP SIZE: 120 PERCENT OF SAMPLE: 6
AVERAGE GRADE: E-5 AVERAGE TICF: 94 MONTHS
AVERAGE TAFMS: 122 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS		PERCENT MEMBERS PERFORMING
M477	ANALYZE UPPER AIR CHARTS	84
G212	PRESENT SHIFT CHANGE BRIEFINGS	84
G170	DECODE TELETYPE MESSAGES	78
M479	ANALYZE VORTICITY CHARTS	78
G171	DECODE WEATHER FORECASTS	77
M485	DETERMINE WEATHER SYSTEM MOVEMENTS	70
M488	LOCATE METEOROLOGICAL FEATURES ON CHARTS	70
G198	POST CHARTS	67
M472	ANALYZE SYNOPTIC SURFACE CHARTS	64
M474	ANALYZE THICKNESS CHARTS	64
G196	PERFORM QUALITY CONTROL PROCEDURES	64
M478	ANALYZE UPPER LEVEL WINDS	63
M459	ANALYZE JET STREAM CHARTS	63
G201	PREPARE AUTOMATIC RESPONSE TO QUERY (ARQ) REQUESTS	63
M467	ANALYZE SATELLITE SENSED DATA	59
G181	FILE TELETYPE MESSAGES	58
M453	ANALYZE FACSIMILE PRODUCTS	57
M489	REANALYZE CENTRALLY-PRODUCED FACSIMILE PRODUCTS	54
M486	EVALUATE ACCURACY OF REPORTED WEATHER DATA	54
I267	BRIEF COMMANDERS	53
M471	ANALYZE STREAMLINE CHARTS	52
M484	DETERMINE WEATHER SYSTEM INTENSITIES	52
G185	LABEL WEATHER MAPS AND CHARTS FOR FACSIMILE NETWORK TRANSMISSIONS	51
G202	PREPARE BRIEFING CHARTS	51
G204	PREPARE BRIEFING TRANSPARENCIES	49

TABLE A8

GROUP ID AND TITLE: STG098, SPECIAL OPERATIONS PERSONNEL
GROUP SIZE: 35 PERCENT OF SAMPLE: 2
AVERAGE GRADE: E-6 AVERAGE TICF: 123 MONTHS
AVERAGE TAFMS: 152 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS		PERCENT MEMBERS PERFORMING
U875	PRACTICE COMMUNICATIONS SECURITY (COMSEC) DURING CONTINGENCY EXERCISES OR OPERATIONS	94
G171	DECODE WEATHER FORECASTS	94
G170	DECODE TELETYPE MESSAGES	94
U804	CONDUCT MOBILITY TRAINING	91
U876	PRACTICE OPERATIONAL SECURITY (OPSEC) DURING CONTINGENCY EXERCISES OR OPERATIONS	91
U851	IDENTIFY EQUIPMENT REQUIREMENTS FOR DEPLOYMENTS	89
U882	PREPARE PERSONAL CLOTHING FOR DEPLOYMENTS	89
U877	PREPARE EQUIPMENT FOR DEPLOYMENTS	86
U889	REVIEW STAFF ASSISTANCE VISIT RESULTS	86
C71	PERFORM SELF-INSPECTIONS	86
U816	DETERMINE EQUIPMENT REQUIREMENTS FOR MOBILITY EXERCISES OR DEPLOYMENTS	83
U852	IDENTIFY EQUIPMENT REQUIREMENTS FOR MOBILITY OPERATIONS	83
U836	DON OR DOFF CHEMICAL WARFARE PERSONAL PROTECTIVE CLOTHING	80
G172	ENCODE MESSAGES	80
E130	WRITE CORRESPONDENCE	77
U883	PREPARE SITES AT DEPLOYED LOCATIONS	77
D99	PLAN TRAINING	77
U857	INSPECT MOBILITY KITS	77
U901	TEAR DOWN, INSPECT, CLEAN, AND REASSEMBLE SMALL ARMS	77
G173	ENCODE WEATHER FORECASTS	77
U873	PLAN MOBILITY TRAINING REQUIREMENTS	74
U888	REVIEW INSPECTOR GENERAL (IG) INSPECTION RESULTS	74
U849	FIRE SMALL ARMS, SUCH AS .38 AND 9MM CALIBER PISTOLS AND M-16 AND GAU-5 RIFLES	74
M469	ANALYZE SKEW T LOG P DIAGRAMS	74
I280	ISSUE LOCAL WEATHER ADVISORIES	74

TABLE A9

GROUP ID AND TITLE: STG087, WEATHER STATION SUPERVISORS
GROUP SIZE: 68 PERCENT OF SAMPLE: 3
AVERAGE GRADE: E-6 AVERAGE TICF: 169 MONTHS
AVERAGE TAFMS: 198 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS		PERCENT MEMBERS PERFORMING
B27	COMPILE DATA FOR REPORTS	93
C71	PERFORM SELF-INSPECTIONS	93
E130	WRITE CORRESPONDENCE	90
B37	COUNSEL SUBORDINATES, SUCH AS ON JOB PROGRESSION, MILITARY-RELATED MATTERS, AND PERSONAL MATTERS	82
A5	DETERMINE WORK PRIORITIES	82
C75	WRITE RECOMMENDATIONS FOR AWARDS AND DECORATIONS	82
D98	MAKE ENTRIES IN OJT RECORDS	82
B33	CONDUCT SUPERVISORY ORIENTATIONS FOR NEWLY ASSIGNED PERSONNEL	81
A16	ESTABLISH WORK SCHEDULES	79
C74	WRITE APR	79
A15	ESTABLISH PERFORMANCE STANDARDS FOR SUBORDINATES	79
C68	INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	79
C58	EVALUATE PERSONNEL FOR COMPLIANCE WITH PERFORMANCE STANDARDS	78
C61	EVALUATE QUALITY CONTROL PROCEDURES	76
C59	EVALUATE PERSONNEL FOR RETENTION IN AIR FORCE	76
A20	PLAN WORK ASSIGNMENTS	76
B26	CERTIFY PERSONNEL	76
E128	REVIEW INCOMING CORRESPONDENCE	75
B34	COORDINATE MAINTENANCE OF EQUIPMENT WITH APPROPRIATE AGENCIES	75
D93	EVALUATE PROGRESS OF TRAINEES	74
A1	ASSIGN PERSONNEL TO DUTY POSITIONS	74
B42	IMPLEMENT QUALITY CONTROL PROCEDURES	72
A9	DEVELOP QUALITY CONTROL PROGRAMS	72
C72	REVIEW AND EDIT RECOMMENDATIONS FOR AWARDS AND DECORATIONS	72
D82	COUNSEL TRAINEES ON TRAINING PROGRESS	72

TABLE A10

GROUP ID AND TITLE: STG252, WEATHER OBSERVER PERSONNEL
GROUP SIZE: 613 PERCENT OF SAMPLE: 30
AVERAGE GRADE: E-4 AVERAGE TICF: 29 MONTHS
AVERAGE TAFMS: 48 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS		PERCENT MEMBERS PERFORMING
J351	MEASURE PRECIPITATION	99
J327	DETERMINE PRECIPITATION TYPES	99
J326	DETERMINE PRECIPITATION INTENSITIES	99
J329	DETERMINE PREVAILING VISIBILITY VALUES	98
J332	DETERMINE SECTOR VISIBILITIES	98
J313	DETERMINE AMOUNT OF COVERAGE OF CLOUD LAYERS ALOFT	98
J316	DETERMINE CEILING	98
J314	DETERMINE AMOUNT OF OBSCURATIONS	98
J337	DETERMINE WIND SPEEDS	97
J334	DETERMINE STATION PRESSURES	97
J325	DETERMINE PRECIPITATION CHARACTERISTICS	97
H226	CHANGE PRINTER RIBBONS	96
J328	DETERMINE PRESSURE ALTITUDES	96
K407	PLOT SKEW T CHARTS	96
H256	REPLACE WIND RECORDER CHARTS	95
J324	DETERMINE NUMBER OF CLOUD LAYERS ALOFT	95
H261	VERIFY ACCURACY OF CLOCKS	94
J365	READ DRY BULB TEMPERATURES	94
J369	READ WET BULB TEMPERATURES	94
J335	DETERMINE TRUE WIND DIRECTIONS	94
G190	PERFORM CLEANUP OF WEATHER STATION	93
J303	ADVISE FORECASTER OF CHANGING WEATHER CONDITIONS	93
G198	POST CHARTS	93
J315	DETERMINE BAROMETRIC PRESSURES	93
G212	PRESENT SHIFT CHANGE BRIEFINGS	92

TABLE A11

GROUP ID AND TITLE: STG067, PLOTTER PERSONNEL
GROUP SIZE: 35 PERCENT OF SAMPLE: 2
AVERAGE GRADE: E-3 AVERAGE TICF: 12 MONTHS
AVERAGE TAFMS: 18 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS		PERCENT MEMBERS PERFORMING
K396	PLOT ICING REPORTS	94
G181	FILE TELETYPE MESSAGES	91
H249	REPLACE PAPER ON TELETYPES	89
H226	CHANGE PRINTER RIBBONS	89
J308	CLEAN ACETATE OVERLAYS	80
K411	PLOT TURBULENCE REPORTS	80
G179	FILE PLOTTED CHARTS	74
K390	PLOT AIRCRAFT REPORTS (AIREP)	71
G180	FILE PLOTTED MAPS	71
H241	REPLACE FACSIMILE PAPERS	71
K401	PLOT PILOT REPORTS (PIREP)	69
G212	PRESENT SHIFT CHANGE BRIEFINGS	69
G170	DECODE TELETYPE MESSAGES	66
G218	REDUCE WEATHER MAPS AND CHARTS FOR FACSIMILE NETWORK TRANSMISSIONS	60
K406	PLOT SEVERE WEATHER REPORTS	60
H227	CLEAN WEATHER EQUIPMENT	57
H243	REPLACE HELIX WIRES IN FACSIMILE RECORDERS	57
G190	PERFORM CLEANUP OF WEATHER STATION	54
K394	PLOT DECODED TELETYPE MESSAGES	54
H239	REPLACE CHEMICALS IN COPY MACHINES	54
G177	FILE AUTOMATED FACSIMILE CHARTS	51
K404	PLOT RADAR REPORTS	51
K412	PLOT WEATHER RECONNAISSANCE OBSERVATIONS (RECCOS)	49
K415	TRACE HEMISPHERIC ANALYSIS AND FORECAST CHARTS	46
H252	REPLACE STYLUS BLADES IN FACSIMILE RECORDERS	46

TABLE A12

GROUP ID AND TITLE: STG176, RADAR OBSERVER PERSONNEL
GROUP SIZE: 11 PERCENT OF SAMPLE: .05
AVERAGE GRADE: E-4 AVERAGE TICF: 28 MONTHS
AVERAGE TAFMS: 50 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS		PERCENT MEMBERS PERFORMING
G217	RECORD RADAR REPORTS (RAREP)	100
K407	PLOT SKEW T CHARTS	100
G190	PERFORM CLEANUP OF WEATHER STATION	100
G212	PRESENT SHIFT CHANGE BRIEFINGS	100
G198	POST CHARTS	91
N493	DETERMINE ECHO COVERAGES	91
G177	FILE AUTOMATED FACSIMILE CHARTS	91
G181	FILE TELETYPE MESSAGES	91
H226	CHANGE PRINTER RIBBONS	91
G199	POST LOCAL WEATHER INFORMATION, SUCH AS OBSERVATIONS, FORECASTS, AND TAKE-OFF DATA	82
N496	DETERMINE ECHO TOPS	82
N499	DETERMINE SPEED AND DIRECTION OF ECHO MOVEMENTS	82
J356	PERFORM PILOT-TO-METRO SERVICES (PMSV)	82
N500	DISSEMINATE RADAR OBSERVATIONS	82
G216	RECORD PILOT REPORTS (PIREP)	82
G201	PREPARE AUTOMATIC RESPONSE TO QUERY (ARQ) REQUESTS	82
H249	REPLACE PAPER ON TELETYPES	82
N512	POST TROPOPAUSE HEIGHTS	82
G179	FILE PLOTTED CHARTS	82
H261	VERIFY ACCURACY OF CLOCKS	82
J382	TEAR MAPS FROM FACSIMILE PRINTER	73
N497	DETERMINE ECHO TYPES	73
N502	LOG RADAR OBSERVATIONS	73
N494	DETERMINE ECHO INTENSITIES	73
N491	ADJUST RADAR RANGE STROBE TO DETERMINE ECHO DISTANCES	73

TABLE A13

GROUP ID AND TITLE: GRP101, INSTRUCTOR PERSONNEL
GROUP SIZE: 32 PERCENT OF SAMPLE: 2
AVERAGE GRADE: E-6 AVERAGE TICF: 114 MONTHS
AVERAGE TAFMS: 132 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS		PERCENT MEMBERS PERFORMING
D105	SCORE TESTS	100
D79	CONDUCT RESIDENT COURSE CLASSROOM TRAINING	97
D76	ADMINISTER TESTS	97
D82	COUNSEL TRAINEES ON TRAINING PROGRESS	94
D101	PREPARE LESSON PLANS	91
D93	EVALUATE PROGRESS OF TRAINEES	81
D107	WRITE TEST QUESTIONS	81
D87	DEVELOP PERFORMANCE TESTS	75
D83	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	69
D88	DEVELOP RESIDENT COURSE CURRICULUM MATERIALS	66
G189	PERFORM BUILDING SECURITY CHECKS	63
D80	CONDUCT SPECIALIZED TRAINING	59
C68	INSPECT PERSONNEL FOR COMPLIANCE WITH MILITARY STANDARDS	59
D94	EVALUATE TRAINING METHODS AND TECHNIQUES	59
C71	PERFORM SELF-INSPECTIONS	56
D97	MAINTAIN TRAINING RECORDS	47
D103	PREPARE TRAINING GUIDES	44
C58	EVALUATE PERSONNEL FOR COMPLIANCE WITH PERFORMANCE STANDARDS	41
D95	IMPLEMENT TRAINING PROGRAMS	38
B37	COUNSEL SUBORDINATES, SUCH AS ON JOB PROGRESSION, MILITARY-RELATED MATTERS, AND PERSONAL MATTERS	38
G171	DECODE WEATHER FORECASTS	38
E130	WRITE CORRESPONDENCE	34
G170	DECODE TELETYPE MESSAGES	34
H226	CHANGE PRINTER RIBBONS	34
D91	EVALUATE EFFECTIVENESS OF TRAINING PROGRAMS	31

TABLE A14

GROUP ID AND TITLE: GRP195, WEATHER FORECASTER PERSONNEL
GROUP SIZE: 767 PERCENT OF SAMPLE: 38
AVERAGE GRADE: E-5 AVERAGE TICF: 87 MONTHS
AVERAGE TAFMS: 108 MONTHS

THE FOLLOWING ARE IN DESCENDING ORDER BY PERCENT MEMBERS PERFORMING:

TASKS		PERCENT MEMBERS PERFORMING
G196	PERFORM QUALITY CONTROL PROCEDURES	96
G171	DECODE WEATHER FORECASTS	96
G201	PREPARE AUTOMATIC RESPONSE TO QUERY (ARQ) REQUESTS	95
G212	PRESENT SHIFT CHANGE BRIEFINGS	95
I269	CNACEL WEATHER ADVISORIES	94
I270	CANCEL WEATHER WARNINGS	94
I280	ISSUE LOCAL WEATHER ADVISORIES	94
M460	ANALYZE LOCAL AREA WORK CHARTS (LAWC)	93
I281	ISSUE LOCAL WEATHER WARNINGS	93
I300	UPDATE WEATHER WARNINGS	92
I299	UPDATE WEATHER ADVISORIES	92
L444	PREPARE WEATHER WARNINGS	92
M469	ANALYZE SKEW T LOG P DIAGRAMS	92
M477	ANALYZE UPPER AIR CHARTS	91
G216	RECORD PILOT REPORTS (PIREP)	91
I264	BRIEF AIR CREWS	90
G170	DECODE TELETYPE MESSAGES	90
G173	ENCODE WEATHER FORECASTS	90
I286	ISSUE WEATHER FORECASTS	90
G199	POST LOCAL WEATHER INFORMATION, SUCH AS OBSERVATIONS, FORECASTS, AND TAKE-OFF DATA	90
L417	AMEND WEATHER FORECASTS	90
G198	POST CHARTS	90
L441	PREPARE WEATHER ADVISORIES	89
L424	PERFORM TERMINAL METWATCHES	89
M489	REANALYZE CENTRALLY-PRODUCED FACSIMILE PRODUCTS	88